THE USE OF INDIVIDUALIZED MULTISENSORY MATERIALS TO DEVELOP A BASIC SIGHT VOCABULARY.
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Two sets of multisensory devices were used to determine whether their individualized use would help retarded readers develop a basic sight vocabulary. Students who had spent 9 or 10 years in school and who were reading at the second-reader instructional level were given the Daniels word recognition list, Forms A and B, as pretests and post-tests. New words were learned through the "Language Master" which allows each student to see the word, hear it, and say it. After mastering the words, the child checked his skill through the "Flash X" which flashes a word one-thirtieth of a second. Tests on words most frequently used in reading and writing English were given periodically. Since nine out of 10 students tested gained 1 year in basic sight word recognition, it seemed that the individualized use of the multisensory devices helped develop a basic sight vocabulary. It is recommended that a definite schedule for practice and checking be arranged for the students, that teachers be given more time through better structuring, and that more scientifically controlled research be made. (NS)
THE USE OF INDIVIDUALIZED MULTISENSORY MATERIALS TO
DEVELOP A BASIC SIGHT VOCABULARY

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I THE PROBLEM

There are students currently enrolled in reading classes, who are reading at an instructional level of second reader or below. These students have spent nine or ten years in school and have not, as yet, mastered a basic sight vocabulary. Many of these students have been taught by the traditional method of small group basal reading; however, most have had some individual instruction.

Since the traditional methods used in small group and individual instruction had not produced an adequate instructional level for these students, it was felt that an entirely different method of instruction should be tried using multisensory materials.

Definition: Multisensory materials as used in this report refers to the Language Master materials produced by Bell and Howell, and the Flash-X materials produced by the Educational Development Laboratories.

Hypothesis: By using individualized multisensory materials it is possible to develop a basic sight vocabulary for students who are presently reading at an instructional level of second reader or below.
II METHODOLOGY - DATA COLLECTION

Experimental Procedures

Testing.

Students were screened by the Daniels Word Recognition List, Form A, which was administered individually. The Daniels Word Recognition List, Form B was also administered individually at the end of the experiment.

Word Lists.

Students were tested on words most used in reading and writing English. These words plus some from classwork were compiled into basic sight word lists for the individual students. No more than ten "new" words were introduced at any given time. Students were periodically checked on these word lists, depending upon the availability of the student and the teacher. The periodical checks ranged from daily to biweekly.

Language Master.

The "new" words were written and taped on the Language Master cards by the teacher.
The cards were then used in the following manner. The student took the card from the packet of cards and tried to pronounce the word. He then placed the card in the Language Master. Immediately after the taped voice said the word, the student said the word. Therefore, he saw, heard and said the word. The student then separated the cards, sorting out for further practice the cards on which there were unfamiliar words. He worked with these until he could pronounce the words at sight. The sight stimulus was thus reinforced by the auditory stimulus.

**Flash - X.**

The "new" words were written on the Flash - X card by the teacher. After the student has successfully completed the Language Master steps, he inserted his card in the Flash - X, which flashed a word at one thirty-sixth of a second. He then checked the word by looking at it in an untimed presentation. If he felt weak in his response to a particular word, he could re-check it on the Language Master.

**Measurement of Variables**

Student gains in word recognition or sight vocabulary were measured by the two forms A and B of the Daniels Word Recognition Lists.
III PRESENTATION AND ANALYSIS OF DATA

Because three students dropped out of school and some dropped out of the program, for which attendance was voluntary, the data given concerns the progress of ten students.

The results of the Daniels Word Recognition Lists, Forms A and B, pre and post tests showed that nine students gained one year in basic sight word recognition. One student gained two tenths of a year in basic sight word recognition in spite of long periods of absence.

A student was considered to have gained a year in instruction when he was frustrated at a level in Daniels Form A (October 1966) and instructional at this same level in Daniels Form B (May 1967).

The above results do not fully show the significant growth that took place. There was considerable growth from the frustrational level to the instructional level. For example: Most students scored forty-eight (48%) percent (frustrational) at a given level in October and eighty-eight percent (88%-instructional) at this same level in May.

Within the instructional level, there was also evidence of growth. A student scored eighty (80%) percent (instructional) in October and ninety-six (96%) percent (instructional or independent) in May.
As a side effect, there was also some growth in word attack skills. It should also be noted, to put the data in the proper perspective, that a tenth grade student having spent ten years in school and instructional at a second reader level would have averaged two tenths of a year's growth in reading per year. The comparison of two tenths of a year to one year's growth in reading appears significant.

The total number of cards learned by these students was four hundred twenty (420). The mean number of cards would therefore be forty-two, with a range of words from 8 to 105. It is interesting to note that the student who learned 105 words had a specific time scheduled daily for practice with the teacher.
IV SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary

In summarizing the results of this pilot project consideration must be given to significant variables which affected student progress.

1. The availability of the students. This type of student is often characterized by frequent absences. He obviously must be in attendance to practice. The teacher plays an important role in checking the student's work. He must be available during class, small group or for individual appointments - which the student far too often forgets to keep.

2. The motivation of the student. Since participation in the program was voluntary on the part of the students, the results may be directly dependent upon the amount of time and effort spent by the student. It is imperative that he work at his task every day. Unfortunately, this was not so. Some students dropped out of the program altogether. However, this lack of motivation appeared to have hindered their academic progress in other areas.

3. Outside reading or classwork. Another variable which may or may not be significant is that there may be other factors such as outside reading or classwork which may also have direct relationship upon a student's progress. However, this variable would probably be related to or dependent upon the above stated variables.

4. Intelligence Quotient. A fourth variable, but for the purposes of this experiment not as significant, appeared to be I.Q. All but two of these students had, at one time
scored in the lower part of the average range in a group intelligence test (CTMM). However, most of the scores are now apparently depressed because of the reading involved in a group intelligence test.

No control was established for the above mentioned variables.

Although nine out of ten students gained one year as compared to the hypothesized two tenths of a year expected growth, the results do not show the considerable growth that took place from frustrational level to instructional level and within the instructional levels. The testing does not indicate the number of new words that some students learned.

Conclusions

It appears that it is possible to develop a basic sight vocabulary using individualized multisensory materials for students at an instructional level of second reader or below. The multisensory materials refer to the Language Master and the Flash - X.

Recommendations

The variables of the availability and motivation of the students appear to be significant. Because of these variables, it is recommended that after the students are screened, a specific time be designed for practice, but, more important, a specific time be designed for checking the students. It might prove to be most advantageous to schedule
these students in small groups together or even feasible to structure the group as a class. This type of student needs the confines of a schedule.

The program itself is time consuming for the teacher. If more time were allotted the teacher, the program could be carried out in a more structured manner, and the results might be even more significant.

Since the use of the Language Master and the Flash - X is a new technique to teach basic sight vocabulary, it is recommended that some controlled research be done in this area.